

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A radiation image read-out apparatus which comprises:
 - a radiation image ~~converter~~ converter panel,
 - a stimulating light projecting means which projects stimulating light onto the radiation image ~~converter~~ converter panel, and
 - a detecting means which detects stimulated emission emitted from the radiation image ~~converter~~ converter panel upon exposure to the stimulating light beam and reads out a radiation image recorded on the radiation image ~~converter~~ converter panel,
 - wherein the ~~improvement~~ comprises that the stimulating light projecting means projects, onto the radiation image ~~converter~~ converter panel, stimulating light in a wavelength range where the rate of change of the intensity of the stimulated emission to a given change of the wavelength of the stimulating light is not larger than 1.0%/nm and is not smaller than -1.0%/nm.
2. (currently amended): :A radiation image read-out apparatus as defined in ~~Claim~~ claim 1 ~~in which~~ wherein the rate of change of the intensity of the stimulated emission to a given change

of the wavelength of the stimulating light is not larger than 0.5%/nm and is not smaller than –
0.5%/nm.

3. (currently amended): A radiation image read-out apparatus as defined in ~~Claim-claim~~ claim 1 in ~~which~~ wherein the stimulating light projecting means comprises a plurality of stimulating light sources which emit stimulating light of different wavelengths and projects synthesized stimulating light including the stimulating light of different wavelengths onto the radiation image ~~converter~~ converter panel so that the stimulating light of different wavelengths are simultaneously projected on the same position on the radiation image ~~converter~~ converter panel.

4. (currently amended): A radiation image read-out apparatus as defined in ~~Claim-claim~~ claim 1 in which the radiation image ~~converter~~ converter panel has a stimuable phosphor layer formed of alkali halide stimuable phosphors.

5. (currently amended): A radiation image read-out apparatus as defined in ~~Claim-claim~~ claim 4 in ~~which~~ wherein the alkali halide stimuable phosphors are represented by formula $MX:A$, wherein M represents at least one of K, Rb and Cs, X represents at least one of Cl, Br and I, and A represents Eu^{2+} or Tl^{+} .

6. (new): A radiation image read-out apparatus as defined in claim 1 wherein the change of wavelength is defined by internal heating of the stimuable light projecting means.

7. (new): A radiation image read-out apparatus as defined in claim 1, wherein the stimuable light projecting means projects stimuable light onto the radiation image converter panel at a wavelength in which the intensity of the stimulated emission is maximized, and wherein the wavelength of the stimuable light fluctuates in a manner that would cause a change in the intensity of the stimuable emission.

8. (new): A radiation image read-out apparatus as defined in claim 3, wherein the rate of change of intensity of the stimuable emission is suppressed to not larger than 1.0%/nm and not smaller than -1.0%/nm as an increase in the intensity of the stimulated emission due to a fluctuation in wavelength of one stimulating light source is cancelled by a reduction in the intensity of the stimuable emission due to a fluctuation in wavelength of a second stimulating light source.

9. (new): A radiation image read-out apparatus as defined in claim 3, wherein the synthesized stimulating light projected by the plurality of stimulating light projection means suppresses the rate of change of intensity of the stimuable emission to not larger than 1.0%/nm and not smaller than -1.0%/nm by cancellation when the plurality of stimulating light projection means fluctuate in wavelength.

10. (new): A radiation image read-out apparatus as defined in Claim 1 in which the stimulating light projecting means comprises one or more stimulating light sources which emit stimulating light in a wavelength range where the rate of change is larger than 0, and one or more

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U.S. Application No. 10/714,851

Attorney Docket No. Q78507

stimulating light sources which emit stimulating light in a wavelength range where the rate of change is smaller than 0.